#### APPENDIX B

## **Cabling Specifications**

This appendix lists the following port pinouts for the supervisor engine and 10/100-Mbps Fast Ethernet switching ports. Note that any pin not specifically listed is not connected.

- Console Port
- 100BaseTX Ports
- 100BaseFX Ports, 1000BaseSX, and 1000BaseLX/LH Ports

## **Console Port**

The console and auxiliary (Catalyst 2926G series switch only) ports vary depending on which Catalyst 2926 and Catalyst 2926G series switch model you are using. The following sections describe the console and auxiliary ports for each model.

### Catalyst 2926 Series Switch

The console port on the Catalyst 2926 series supervisor engine is an EIA/TIA-232, data communications equipment (DCE), DB-25 receptacle. Both data set ready (DSR) and data carrier detect (DCD) are active when the system is running. The Request To Send (RTS) signal tracks the state of the Clear To Send (CTS) input. The console port does not support modem control or hardware flow control. Table B-1 lists the console port pinouts.

Cabling Specifications B-1

#### **Console Port**

Pin	Signal	Direction	Description
1	GND		Ground
2	RxD	_>	Receive data
3	TxD	<	Transmit data
4	CTS	<	Clear to send
5	RTS	_>	Return to send
7	GND		Ground
8	DTR	_>	Data terminal ready
20	DCD	<	Data carrier detect

Table B-1 Catalyst 2926 Series Console Port Pinouts

### Catalyst 2926G Series Switch

Note The Catalyst 2926G series switch auxiliary (AUX) port is currently not supported.

You can connect the Catalyst 2926G series switch console port to an ASCII terminal or PC running terminal emulation software. Table B-2 lists the pinouts for the asynchronous serial console port. In addition to the RJ-45-to-RJ-45 cable provided in the console port accessory kit (shipped with your switch), you will need either an RJ-45-to-DB-9,

RJ-45-to-D-subminiature female, or RJ-45-to-D-subminiature male adapter (these adapters are provided in the accessory kit).

B-2 Catalyst 2926 Series and Catalyst 2926G Series Installation Guide

Console Port	Console Device	
Pin (signal)	Connect to	
1 is looped to pin 8	n/a	
2 (DTR)	DSR	
3 (RxD)	TxD	
4 (GND)	GND	
5 (GND)	GND	
6 (TxD)	RxD	
7 (DSR)	DTR	
8 is looped to pin 1	n/a	

 Table B-2
 Catalyst 2926G Series Console Port Pinouts

## **100BaseTX Ports**

This section lists the Catalyst 2926 series switch supervisor engine 100BaseTX port pinouts.

#### Fast Ethernet MII Connector Output Signals

Most Ethernet transceivers require a transceiver cable to connect an Ethernet transceiver to the supervisor engine module and Ethernet switching module Ethernet ports. Some unshielded twisted-pair (10BaseT) transceivers are compact enough to connect directly to the Ethernet module ports without impeding other connections.

Table B-3 lists the output signals for the 40-pin media-independent interface (MII) Fast Ethernet connector on the supervisor engine module.

**Note** Table B-3 lists the *output signals* from the MII connector on the supervisor engine module, not the *pinouts* of the cable connecting to the module.

Cabling Specifications B-3

#### 100BaseTX Ports

Output Signais				
Pin	Signal			
1, 20, 21, 40	+5V			
2	MDIO			
3	MDC			
4	RxD<3>			
5	RxD<2>			
6	RxD<1>			
7	RxD<0>			
8	Rx_DV			
9	Rx_Clk			
10	Rx_Er			
11	Tx_Er			
12	Tx_Clk			
13	Tx_En			
14	TxD<0>			
15	TxD<1>			
16	TxD<2>			
17	TxD<3>			
18	Col			
19	CRS			
22 through 39	Common			

#### Table B-3 Supervisor Engine Module 40-Pin MII Fast Ethernet Connector Output Signals

## Fast Ethernet TX MDIX Port Output Signals

Table B-4 lists the output signals for the RJ-45 Fast Ethernet 100BaseTX media-dependent interface crossed-over (MDIX) connector and Fast Ethernet 100BaseTX module connectors on the supervisor engine. The receive and transmit signals are polarized. One pin of each signal pair carries the positive (+) signal, and the other pin carries the negative (-) signal.

**Note** Table B-4 lists the *output signals* for the RJ-45 Fast Ethernet 100BaseTX MDIX connector and Fast Ethernet 100BaseTX module connectors on the supervisor engine module, not the *pinouts* of the cable connecting to the modules.

Pin	Signal	Description
1	RxD (+)	Receive Data (+)
2	RxD (-)	Receive Data (-)
3	TxD (+)	Transmit Data (+)
4	NC	No Connection
5	NC	No Connection
6	TxD (-)	Transmit Data (–)
7	NC	No Connection
8	NC	No Connection

Table B-4 Fast Ethernet 100BaseTX MDIX Port Output Signals

# 100BaseFX Ports, 1000BaseSX, and 1000BaseLX/LH Ports

This section describes the supervisor engine 100BaseFX (Catalyst 2926 and Catalyst 2926G series switches) and 1000BaseSX and 1000BaseLX/LH (Catalyst 2926G series switch only) port cable connectors.

You can use SC-type fiber-optic connectors to connect to the Fast Ethernet and Gigabit Ethernet single-mode and multimode fiber-optic ports (see Figure B-1).

Cabling Specifications **B-5** 





B-6 Catalyst 2926 Series and Catalyst 2926G Series Installation Guide